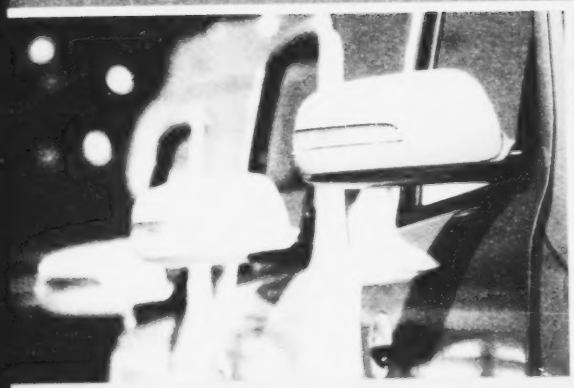
THE IRSST: RESEARCH IN THE PRESENT TENSE



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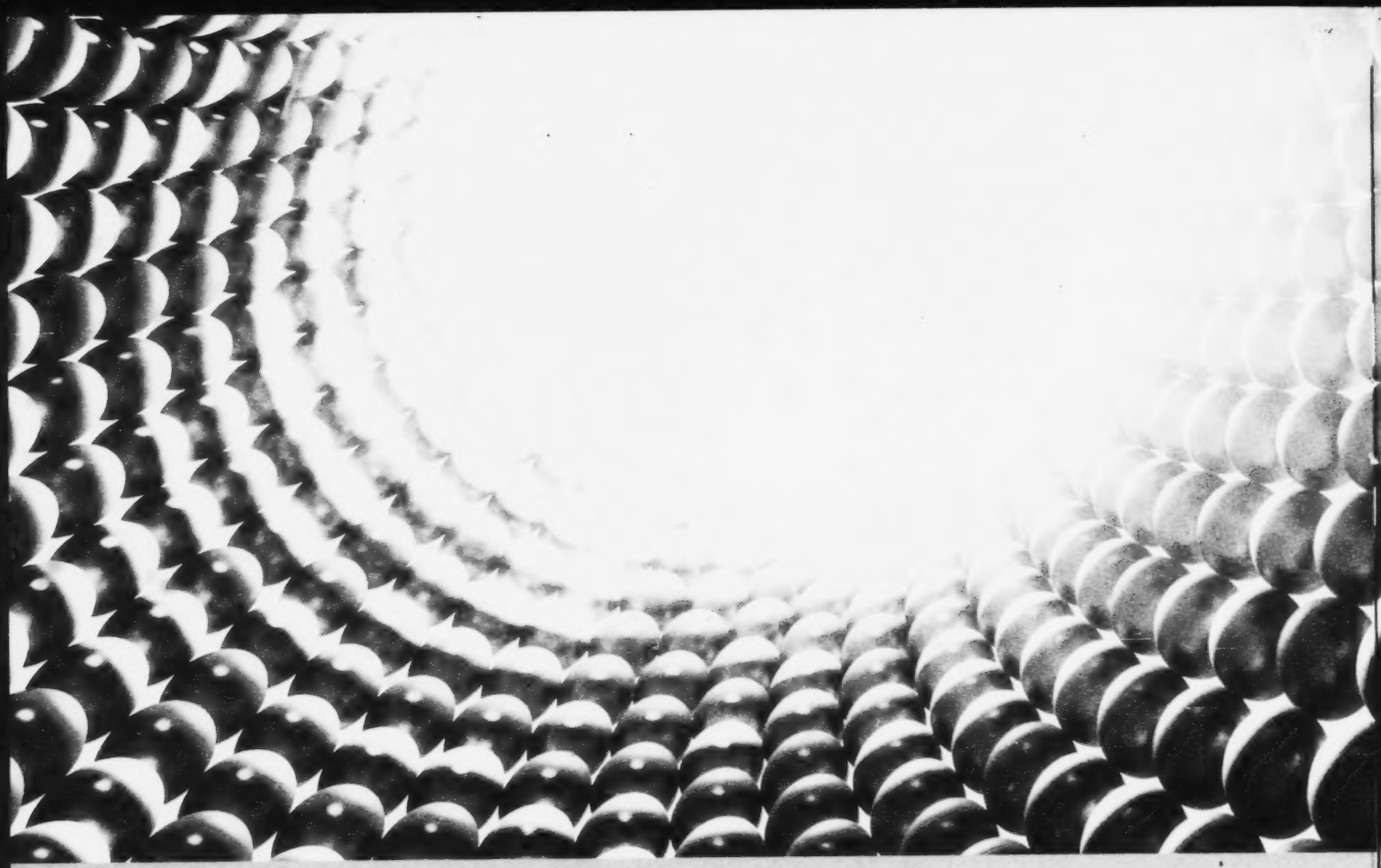


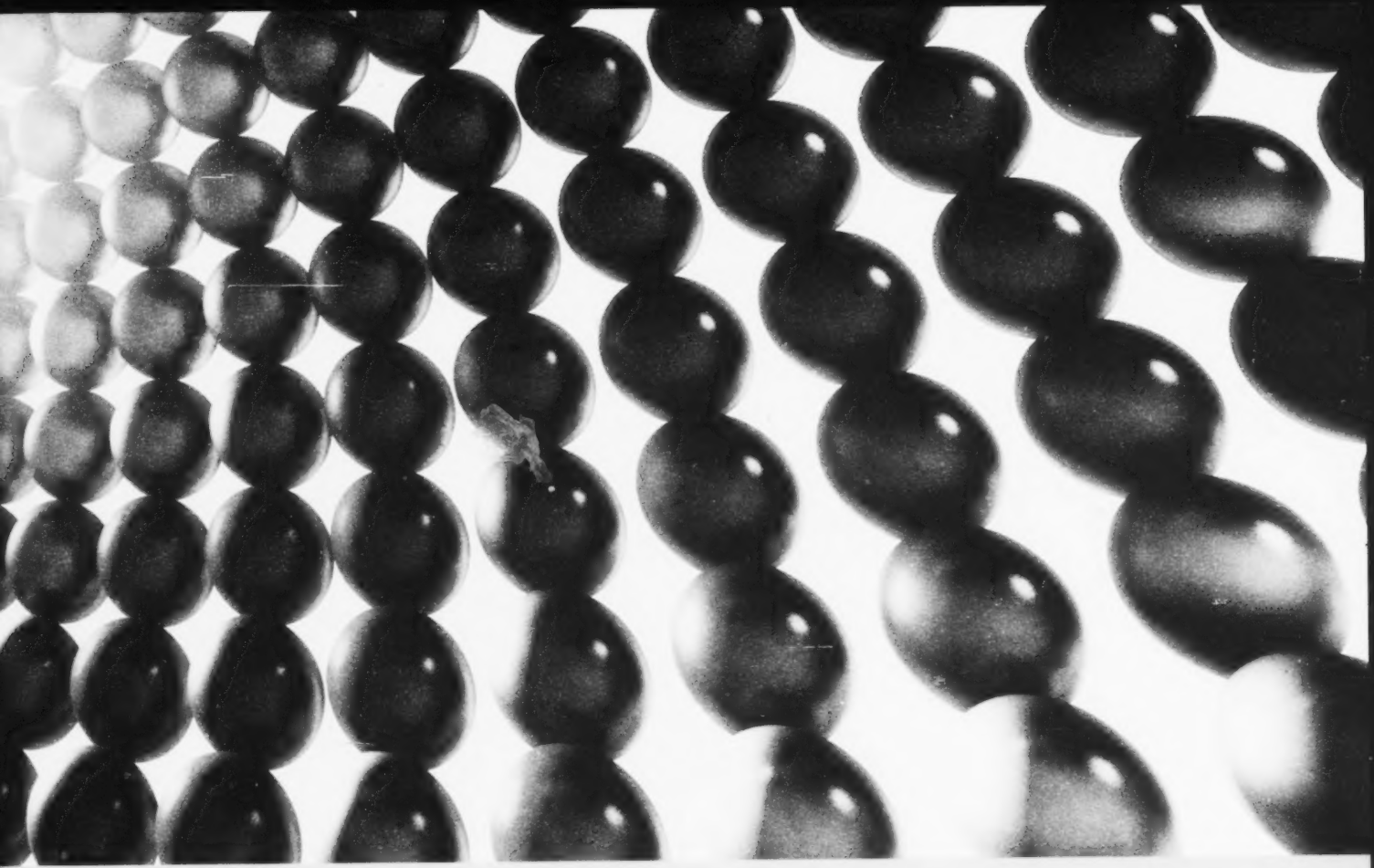
DECLARATION OF DATA RELIABILITY

As president and CEO, I am responsible for the information contained in this activity report. I attest to the accuracy of the information and the reliability of the controls carried out.

Recommended by the members of the Scientific Advisory Board and the Board of Directors, this 2007 activity report faithfully describes the mission, vision and main achievements of the Institut de recherche Robert-Sauvé en santé et en sécurité du travail (IRSST). It sets out indicators selected to assess production and provides accurate and reliable data on the results obtained.

I therefore declare that I have every reason to believe that the facts and data provided in this activity report correspond to the situation as at December 31, 2007.

Diane Gaudet
President and CEO
IRSST



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MESSAGE FROM THE PRESIDENT AND CEO

The end of 2007 coincides with the time when my mandate ends and my retirement begins. When I was appointed five years ago, I made several commitments. My first priority was for the IRSST to ensure that science always be used to further the comprehension and resolution of emerging issues. At the same time, we wanted to increase our research capacity and make certain that results were even more useful to our partners by systematically ensuring the transfer of knowledge to the workplace. To this end, we established a 2006-2010 Strategic Plan, *Daring to change*, which was presented to the Scientific Advisory Board and approved by the Board of Directors.

WINNING FORMULA

Thanks to this plan, many facets of which are progressing ahead of schedule, we already have an idea of the added value of our new organizational model. Thus, at the same time that the Knowledge Transfer and Partner Relations Department was establishing the framework for its knowledge transfer procedure, it carried out concrete projects that left no doubt as to the merit of this orientation. Fact sheets, prevention guides and computer-based tools thus enhanced an already flourishing production. The strategy consisting in involving intermediaries from the very start of a project by promoting their participation, constitutes, without a doubt, a winning formula. The same held true for the Statistical Knowledge and Surveillance Group, whose establishment this year made it possible to envisage the production of indicators by research field by the end of 2008. This will allow, in particular, sectors and occupations at risk in terms of age and sex to be identified, in order to support strategic orientations and research programs. For its part, the scientific watch process is gradually becoming integrated into the organization's procedures. Supported by the Documentation Centre, our seven research fields also have a strategic watch agent at their disposal to ensure the collection, analysis and transmission of scientific information for strategic and operational purposes. The full impact of this strategic watch will be felt over the coming years, with the result that the IRSST will be better equipped than ever to fulfill its mission.

STRONGER MANAGEMENT

In tandem with this repositioning, we had to give life to the new organizational structure and be able to support it. We therefore made a concerted effort to revitalize management. Various administrative measures were adopted to increase operational efficiency and process conformity, while promoting greater accountability on the part of the organization. Concerned about the future, we put in place monitoring resources and tools designed not only to more effectively measure the progress of projects and activities, but also to better define management's expectations regarding employees.

I am convinced that the IRSST has everything that it needs to fulfill its mission and meet the challenges of the coming years. Credit must be given first and foremost to our personnel, but also to our many partners. Whether they are employer or union allegiances, whether they are part of the Commission de la santé et de la sécurité du travail (CSST), the Ministry of Health and Social Services network, joint sector-based associations or universities, private or public enterprise, whether they are from Québec or elsewhere, their contribution is invaluable. Thanks also goes to our governing bodies, namely, the members of the Scientific Advisory Board and Board of Directors, who believe in occupational health and safety (OHS) research and who provided us with the means to implement these changes. Thanks to you, the IRSST is so present.

SUPPORT FROM OUR EXTERNAL COLLABORATORS

I would like to pay special tribute to the external researchers. Through its funding segment, the IRSST has played an historic and crucial role in building an OHS research community; however, its achievements would not be possible without the substantial support of researchers from universities and private centres. This major contribution must not only be maintained, but also encouraged and stimulated.

It is now time to pass the torch to Marie Larue. I wish her every success in ensuring that the IRSST remains a benchmark and a scientific and technical centre whose reputation extends beyond our borders.

Once again, thank you. Thank you to all those who work daily to improve occupational health and safety.

Diane Gaudet
December 2007

I am very proud to take up the torch with the goal of mobilizing the IRSST's personnel to achieve our mission and develop the next three-year research plan. Determined to act in the best interest of Québec workers and employers, I will ensure that the IRSST assumes, more than ever before, its role of scientific benchmark and expert for the occupational health and safety prevention network.

Marie Larue
Marie Larue, interim president and CEO
January 2008

THE IRSST

PRESENT IN NUMBERS

THE IRSST PRESENT IN RESEARCH

175 projects [illegible] were active.[1]

92 files were completed.

49 files were approved, broken down as follows:

26 [illegible]
15 external
8 external

57 files were being developed.

67 partner organizations in the network were involved in projects.

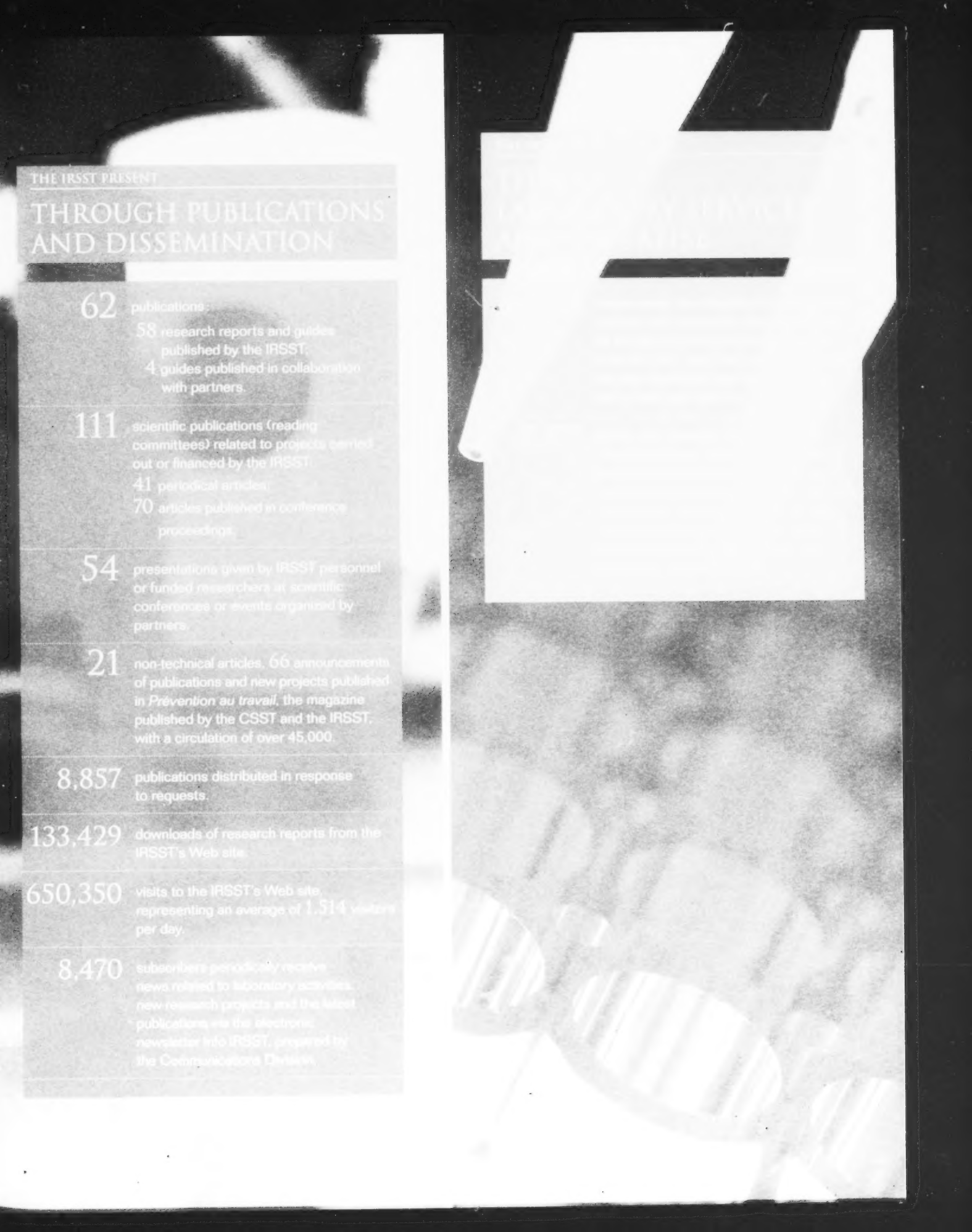
108 new requests for expertise were accepted.

29 committees of the CSST and its network, including regulatory committees, had at least one IRSST representative.

14 national and international standardization committees invited the IRSST to serve on them in an expert capacity.

37 scholarships were awarded, for a total of $424,400[1].

[1] Summaries of all projects carried out or funded by the IRSST, as well as the complete list of its scholarship recipients, are available on the IRSST's Web site: www.irsst.qc.ca



THE IRSST PRESENT

THROUGH PUBLICATIONS AND DISSEMINATION

62 publications:
- 58 research reports and guides published by the IRSST;
- 4 guides published in collaboration with partners.

111 scientific publications (reading committees) related to projects carried out or financed by the IRSST:
- 41 periodical articles;
- 70 articles published in conference proceedings.

54 presentations given by IRSST personnel or funded researchers at scientific conferences or events organized by partners.

21 non-technical articles, 66 announcements of publications and new projects published in *Prévention au travail*, the magazine published by the CSST and the IRSST, with a circulation of over 45,000.

8,857 publications distributed in response to requests.

133,429 downloads of research reports from the IRSST's Web site.

650,350 visits to the IRSST's Web site, representing an average of 1,514 visitors per day.

8,470 subscribers periodically receive news related to laboratory activities, new research projects and the latest publications via the electronic newsletter Info IRSST, prepared by the Communications Division.

THE IRSST PRESENT...

THROUGH ITS QUALIFIED PERSONNEL

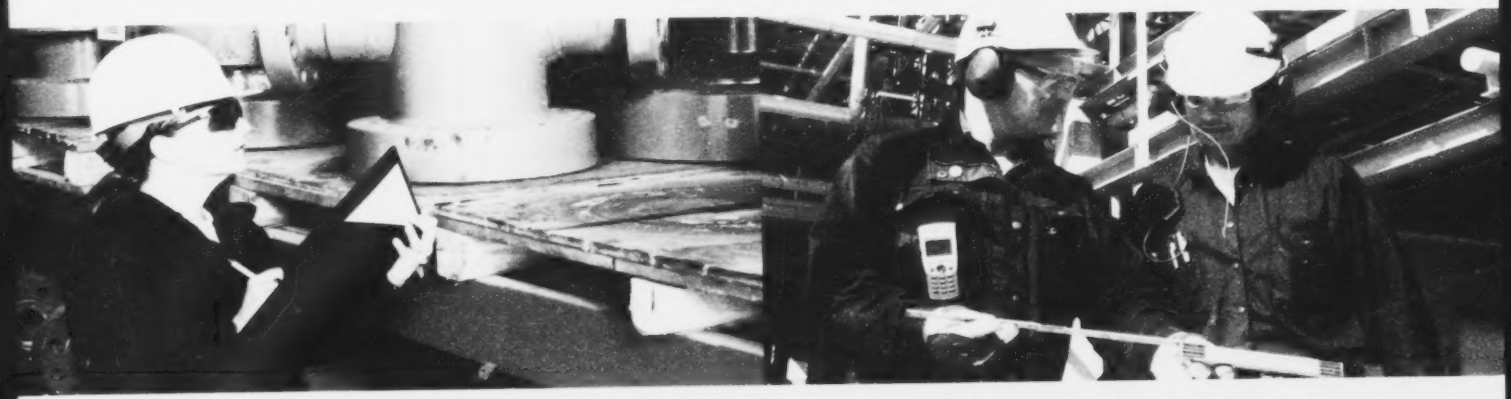
ITS VALIDATED KNOWLEDGE

ITS CERTIFIED LABORATORIES

THE IRSST

PRESENT AS A GENERATOR OF KNOWLEDGE

Research plays a critical role in solving the problems of today and meeting the challenges of tomorrow. In OHS, as in other fields, new issues emerge in tandem with technical progress, organizational changes or innovative procedures.



To stay in the race, the IRSST arrives at the starting line each year with about fifty new relevant, priority research projects for its prevention partners.

Once again, in 2007, the IRSST enhanced the knowledge vital for the elimination of hazards at source, the prevention of occupational injuries and the rehabilitation of victims.

Twenty years after the Spitzer Report on spinal disorders, a study financed by the IRSST—*Les déterminants de l'incapacité liée aux lombalgies (Determinants of disability related to low back pain)*—is achieving success and attracting attention from both specialists and the media by making it possible to better understand the complex dynamic of the development of chronic disability related to low back pain. The team led by **Manon Truchon**, professor at Laval University and researcher at the CIRRIS (Centre for Interdisciplinary Research in Rehabilitation and Social Integration), benefitted from the collaboration of IRSST researcher **Ginette Truchon**. Focusing on 439 low back pain workers on sick leave, this research generated evidence-based data on a group of variables to consider in explaining the development of chronic disability. The most important of these variables is workers' negative perception of OHS practices, which increases job-related fears: the worker fears a return to work, as well as the possibility of becoming injured again. In addition, the authors suggest that chronic disability may be associated with a decrease in the secretion of hormones preparing a person to deal with stress. If this theory is confirmed by other studies, it could lead to the identification of mechanisms explaining, for example, the link between psychological distress and chronic or prolonged disability.

By examining no fewer than 220,000 results of environmental analyses performed by its laboratories between 2001 and 2005, an IRSST team, led by chemist **Claude Ostiguy**, created a unique profile of worker exposure to chemicals. The interpretation of the results of these analyses helped determine what substances are present in high concentrations and in which activity sectors. The researchers identified 50 chemicals and 141 industrial categories. It became clear that the levels of certain substances often equal or exceed exposure standards. The study was part of an initiative aimed at monitoring and identifying substances that should be studied or subject to worker exposure control measures.

- Whether through a study conducted by **Jérome Boutin** demonstrating the feasibility of using a mechanical system rather than human subjects for determining the vibratory emissions of percussive manual tools or through an evaluation by scientist **Chantal Gauvin** and her colleagues of 12 tests for establishing the dexterity offered by protective gloves in order to identify which battery of tests would be the most effective, the results of these projects promoted the development of knowledge and enhanced the IRSST's expertise. This was also the case when external researchers, such as **Daniel Bourbonnais** from the Université de Montréal and his team, demonstrated that strength, mobility and pain are relevant variables for measuring hand performance in workers with De Quervain's disease.

- Work-related cancers involving fire fighters are a major source of concern. Over the past few years, the CSST has received claims to have various types of cancers among them recognized as occupational diseases. Since it was difficult, in the absence of epidemiological studies, to establish a link between the incidence of a cancer and the characteristics of the job, the CSST entrusted the IRSST with the mandate of carrying out a critical review of the epidemiological literature related to this issue. As a result, in 2007, Dr. **Douglas B. McGregor** published the four final reports in a series of seven, namely, those concerning leukemia, colorectal cancers and non-Hodgkin's lymphoma, and the risks of multiple myeloma and cancer of the respiratory tract, oesophagus, stomach, pancreas, prostate, testicles and skin.

- At the request of the Ministry of Labour, the IRSST began coordinating the very first Québec study on work, employment and OHS conditions. This project, co-directed by **Esther Cloutier** from the IRSST and **Michel Vézina** from the INSPQ, was carried out in partnership with the Ministry of Labour, the Ministry of Health and Social Services, the Institut de la Statistique du Québec (Québec statistics institute), and the Commission des normes du travail (labour standards board). It will generate results that will serve as a strategic watch tool and enhance knowledge about different OHS determinants and work situations that may be associated with problems (accidents, musculoskeletal disorders (MSDs), psychological health).

THE IRSST

PRESENT THROUGH ITS SCIENTIFIC EVENTS

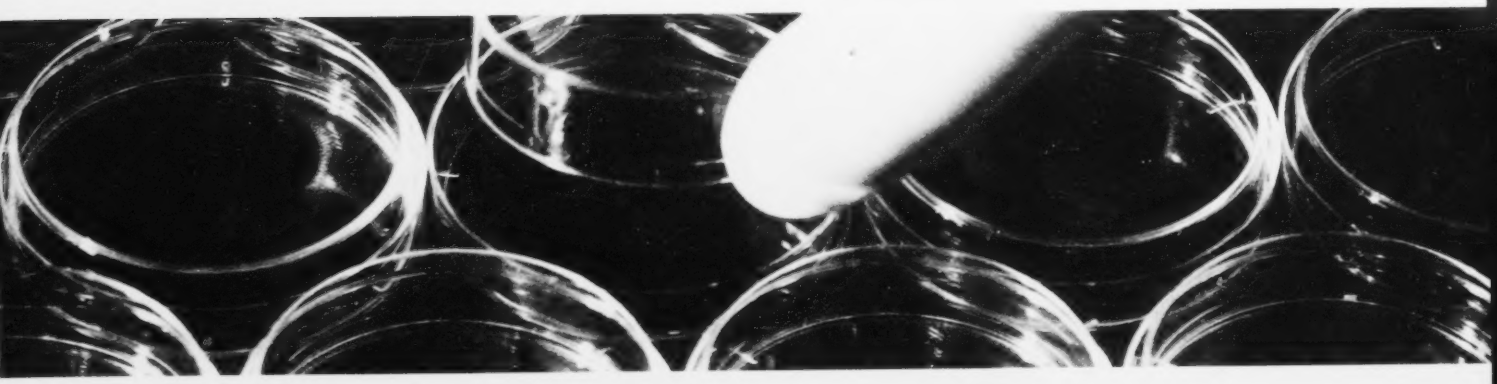
In 2007, topics such as approaches in accident prevention, slipperiness of floors, shoring, respiratory protection, nanotoxicology, the effects of solvents on hearing, the comparison of ventilation systems, cutting fluids, methods and the evaluation of ergonomic interventions, resulted in some fifteen scientific events. Thus, nearly 1,000 people, researchers, CSST, MSSS and joint sector-based associations, consultants and partners accepted the IRSST's invitations to discuss methods to be implemented for enhancing prevention, raising the awareness of a particular sector, improving conceptual methods or frameworks, evaluating interventions, or promoting the integration or preparation of the next generation of researchers.

- Scientific Director **Paul-Émile Boileau** proposed *OHS risk assessment: convergences and divergences of various disciplinary approaches* as the theme of the IRSST's annual colloquium. Bringing together over 130 researchers, professionals, employer and worker representatives as well as our partners, this event was an excellent opportunity to discuss the issues and challenges involved in applying various disciplinary approaches in the area of risk assessment.

THE IRSST

PRESENT THROUGH ITS CERTIFIED LABORATORIES

Research engine in industrial hygiene, Laboratory Services and Expertise performs vital functions for supporting all OHS professionals. In addition to the tens of thousands of environmental, toxicological or microbiological analyses carried out for its partners and its clients, the IRSST's laboratories stand apart by offering cutting-edge expertise.



Thanks to the know-how of its technical and scientific personnel and its certifications, the laboratories play a benchmark role that allows them to participate in the development of industrial hygiene, environmental monitoring and the biological surveillance of Québec workers.

The IRSST's **Claude Ostiguy** and the personnel of the CSST's Répertoire toxicologique combined their expertise in order to more clearly identify the chromate exposure values prescribed by the Regulation respecting occupational health and safety (RROHS). They also proposed a sampling strategy taking into account different industrial processes. The committee in charge of reviewing RROHS standards, on which the above-mentioned persons serve, reacted favourably to a proposal that facilitates the application of the regulation in the workplace. Subsequently, the IRSST laboratory personnel, including **Pierre Larivière**, developed two new analytical methods for measuring soluble and insoluble chromates. Thus, the laboratory's clients and OHS professionals have access to better-defined rules and can now evaluate chromate exposure in sectors including industries that use electroplating.

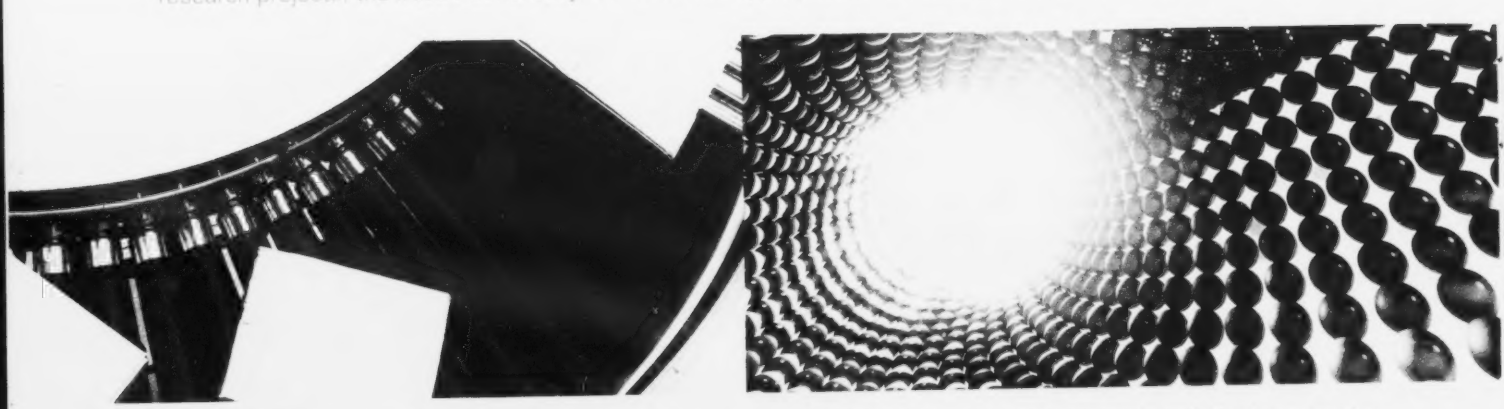
By being involved in standardization committees, the laboratories' scientists can not only compare their expertise to that of their peers, but also defend ideas that prove beneficial for customer service. This is what microbiologist **Geneviève Marchand** did by promoting an approach developed by the IRSST in front of the ASTM International standardization committee on which she serves. This participation allowed her to influence the course of discussions and foster a consensus on the method for trapping spores for the analysis of total mycological contaminants. The IRSST now offers a new analysis service that is based on a method that will soon be standardized by the ASTM, and which, above all, requires much less time for determining the presence of microorganisms. The contributions to standardization research and the achievements of the microbiology laboratory since 1990 have undoubtedly accounted for the interest shown by an agency of the Ministry of the Environment in the IRSST's expertise. Thus, the Centre d'expertise en analyse environnementale du Québec (CEAEQ) offered to participate in the accreditation of the IRSST's microbiology laboratories, thereby allowing them to continue playing their role as scientific reference centre and expert.

The laboratories' contribution to the advancement of knowledge is also evident in the results achieved during the development of a new approach for simultaneously evaluating different amines in the workplace. An IRSST scholarship recipient, **Mathieu Fournier**, and his fellow researchers initially identified a reagent for simultaneously sampling three different amines and doing a quantitative analysis of them. Then, using this same reagent, they developed a method to analyze seven amines that are among those most likely to be used in Québec workplaces. This new approach has the advantage of including a unique sampling system, independent of the amine to be quantified, and that can be used at a sufficient flow rate to sample not only vapours, but also aerosols.

THE IRSST

PRESENT WHERE IT IS RELEVANT

The added value of a research centre is not established only through knowledge development. Its usefulness also increases through knowledge transfer. By deciding to systematically integrate the transfer concept into all its research projects, the IRSST concretely facilitates the appropriation of research results by workplaces.



In addition, by increasing its exchanges with its main partners, the IRSST better targets their needs and obtains a greater commitment from them to carry out promotional activities. The usefulness and relevance of research then becomes clearer. This is the objective of **Louis Lazure**, Director of the Knowledge Transfer and Partner Relations Department. Supported by the Communications Division, knowledge transfer advisors **Renée Liboiron**, **Louis Bousquet**, **Charles Gagné** and **Laurent Gratton** thereby see their transfer efforts translate into the realization of promotional activities and the development of numerous practical tools for OHS practitioners.

After conducting two studies, a group of researchers headed by **Marie St-Vincent**, research leader of the MSD field, used the developed knowledge to produce a prevention guide on manual material handling and customer service in warehouse superstores, a sector where back ailments can account for up to 50% of compensated injuries. This guide was designed to improve the working conditions of all personnel required to handle merchandise and serve customers. It contains a checklist for identifying problems, six solution sheets, as well as a solution evaluation grid. To maximize the dissemination of this guide, the IRSST entered into an agreement with AON Consulting Group.

Countless loading docks exist, and are often associated with numerous accidents. They are the focus of several research activities, including a vast project headed by the IRSST's **Laurent Giraud** on the development of a tool for evaluating truck restraining measures on loading docks. Carried out by scientists from the IRSST and the Université du Québec à Trois-Rivières, this project also resulted in the publication of a research report. This knowledge led a team of researchers, a knowledge transfer advisor and a computer analyst to create a guide, technical fact sheet, questionnaire and the *Doc Quais* computer-based tool for improving safety on loading docks.

In 2007, documentation was enhanced by the results of two studies: *Surveillance of occupational asthma in apprentices in high-risk sectors* and *Use of sensitizers or irritant agents in a construction-trade teaching environment*. Using mainly the results of this research, **Brigitte Roberge** from the IRSST, **Denyse Gautrin** from Hôpital du Sacré-Cœur and other colleagues developed seven fact sheets for preventing the risks associated with various training and work environments. These fact sheets help workers become more familiar with the main agents and learn how to protect themselves in high-risk sectors: baking and pastry making, carpentry and joinery, dental hygiene, plumbing and heating, plastering, animal health.

Whether in deep mines or during hay harvesting, in a closed environment or an open space, exposure to extreme temperatures represents a risk for workers. The knowledge developed on heat strain and stress gave rise to useful applications in the field. **Pierre Dessureault**, researcher at the Université du Québec à Trois-Rivières, mainly verified the agreement between various measurement methods for estimating heat stress. The IRSST's

Daniel Drolet then developed a computer-based tool that guides OHS practitioners in making decisions to prevent heat strokes. Tested by potential intermediaries, the tool includes an electronic version of the *Guide de prévention coups de chaleur* (heatstroke prevention guide), prepared by the CSST and the Québec Ministry of Health and Social Services. A second computer-based tool was developed to facilitate the application of the Regulation respecting occupational health and safety regarding the alternate work/rest regime in a hot environment.

Lift trucks can tip over and endanger the lives of operators, but they can also cause fatal collisions. This is what the Association paritaire transport et entreposage (ASTE, sector-based transportation and storage association) decided to illustrate in the guide *Lift trucks and pedestrians. A lane for each*, in which the IRSST collaborated. In this publication, **Pierre Bouliane** from the ASTE, **Sylvie Beaugrand** from the IRSST and other colleagues target all those who are involved in activities requiring the use of a lift truck in order to make them aware of the risks of collision and to propose prevention methods.

Commonly used in pathology laboratories, formaldehyde is the subject of a prevention fact sheet produced with the collaboration of the Association paritaire pour la santé et la sécurité du travail du secteur affaires sociales (ASSTSAS, joint sector-based association for occupational health and safety in the social affairs sector). Documenting the risks and health effects, this fact sheet provides information on exposure control methods and protective equipment. It specifies, mainly, that neither surgical masks nor N-95 particulate masks ensure protection against this gas. This publication is one of the spinoffs of the numerous projects on formaldehyde in the workplace carried out by the team directed by the IRSST'S **Nicole Goyer** and researchers from the Université de Montréal.

For workers in household waste sorting centres, wastewater treatment plants, agricultural enterprises, food and beverage processing companies, hospitals, etc., bioaerosols can represent a danger during strong exposures. In this context, **Jacques Lavoie**, **Yves Cloutier**, **Jaime Lara** and **Geneviève Marchand** from the IRSST created a guide to help workers better choose appropriate respiratory protection. This original document provides a description of the respirators, the filtration mechanisms, as well as information on their fit, seal and maintenance.

By combining the potential of *Prévention au travail* magazine, the Web site, and the *Info IRSST* electronic newsletter with that of relational marketing, the Communications Division expanded its clientele and optimized the promotion of research results. While strengthening ties with its loyal partners, these new procedures helped establish more personalized communication with a new clientele by promoting publications that could be of interest and by providing information about scientific events.

In addition to generating more media coverage, this multi-faceted promotional strategy had a snowball effect on the number of research reports downloaded from the IRSST's Web site. In 2007, the number of downloads exceeded 133,000, an increase of more than 100% over 2006.

To reinforce the efforts of preventionists, the IRSST converts its research results into support tools. In addition to updating these tools, the scientific and computer services personnel create new ones. The computer-based tools are used to calculate, establish, correct or even inform with greater efficiency and speed. For example, users can calculate CO emissions, establish alternate work/rest periods for heat stress, convert data or even gain quicker access to information on substances governed by the Regulation respecting occupational health and safety.

Thus, in 2007, close to 4,000 professionals downloaded a copy of the *Guide électronique de prévention des coups de chaleur* (heatstroke prevention electronic guide), which makes it possible to calculate the corrected air temperature. Moreover, the popularity of *Vemplre* did not wane, with nearly 2,000 new downloads during the year. Created in 2003, this computer-based tool provides easy access to information from six Web sites on regulated substances in Québec.

THE IRSST

PRESENT HERE AND ABROAD

LEAVING ITS MARK

Through its research leadership and the influence it gains from networking and partnerships, the IRSST, in keeping with its vision, pursued its efforts to be recognized on the national and international scenes..

Whether by participating in the work of associations or organizations like the Sheffield Group, which brings together directors of the world's leading OHS research institutes, or through international missions and involvement in standardization committees, or by organizing scientific and promotional activities or by being asked to take part in scientific conferences, here and abroad, the IRSST's personnel is making its presence felt in places where it is important to promote its research results and influence standardization. Here are a few examples:

CANADA-QUÉBEC

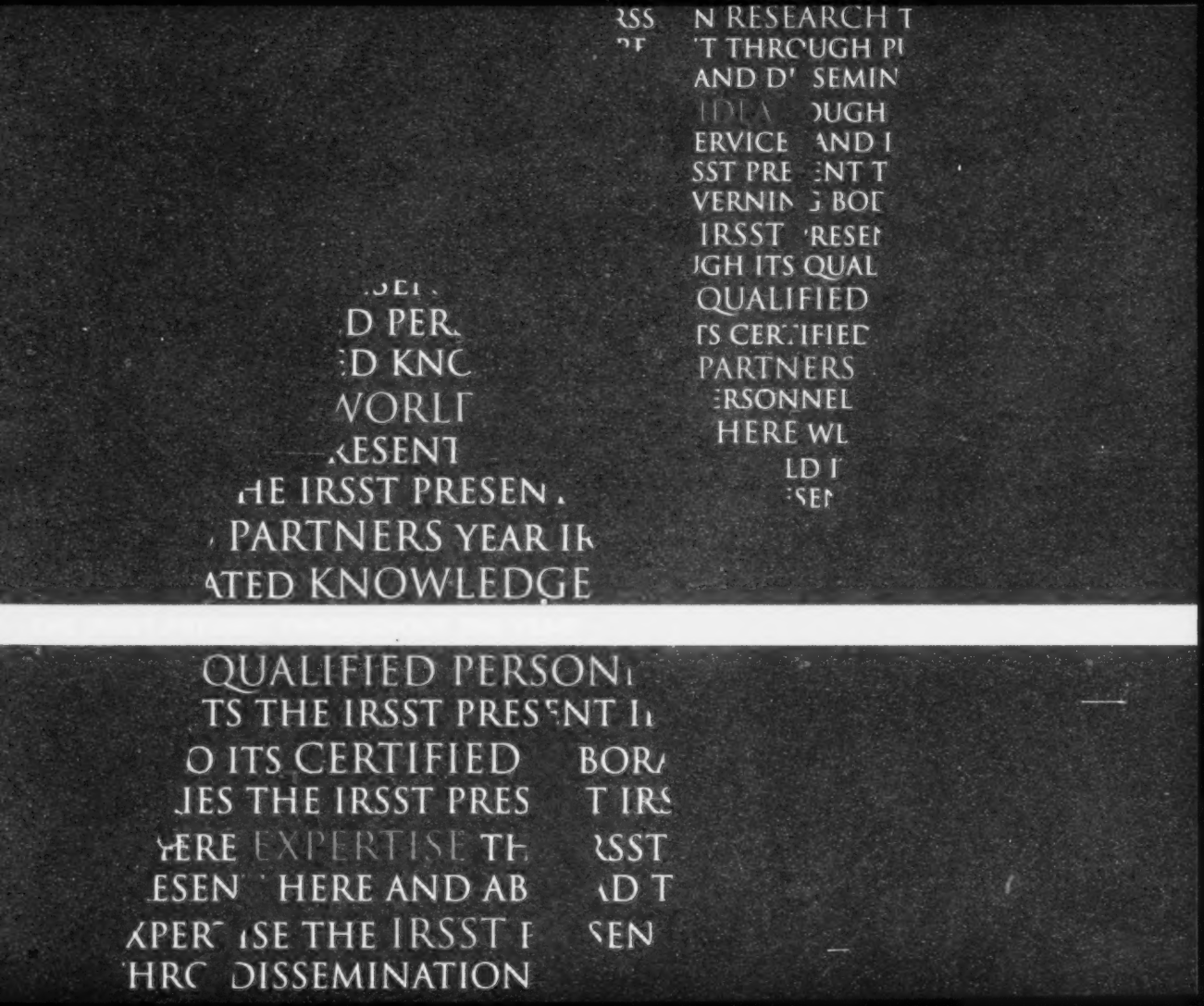
The integration of OHS expertise into occupational and technical teaching and training constitutes an important issue. It is for this reason that the IRSST's President and CEO, **Diane Gaudet**, chaired the International Social Security Association (ISSA) for education and training in prevention. Among the many activities held, the IRSST and the CSST hosted the meeting of ISSA's Special Commission on Prevention, which brought together all the chairs of the Association's international committees.

RUSSIA

In the fall, Ms. Gaudet joined 1,200 participants from 126 countries in Moscow for the very first Social Security World Forum. This Forum provided experts with an interactive platform for examining today's challenges and tomorrow's solutions in relation to a range of topics affecting social security.

BRAZIL

Since 2005, the IRSST has played a role in the improvement of OHS in Brazil by collaborating on an international project involving various Canadian partners, including the Canadian International Development Agency. Under the responsibility of **Jean-Claude Martin** and **François Hébert**, the IRSST's contribution is aimed at increasing the ability of Brazilian representatives of SESI—an organization that provides social services to this country's companies—to collect, record and analyze data on occupational injuries and working conditions. The IRSST's contribution to this project generated concrete results in 2007. These included the publication of reference documents listing the OHS data sources and variables available in Brazil, based on the method developed and validated by the IRSST for organizing and grouping information.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JANUARY

The IRSST hosted a workshop on respiratory protection against bioaerosols. Organized by Jacques Lavoie (1) and Yves Cloutier (2), it was part of a process of collaboration and sharing of information among experts. The discussions focused mainly on the recommendations contained in the IRSST's *Guide on respiratory protection against bioaerosols*.

FEBRUARY

Coordinator and strategic watch agent of the IRSST's Musculoskeletal Disorders research field, Denise Chicoine (3) was elected Vice-President of the Association of Canadian Ergonomists, Québec Region.

The IRSST and the Association of Canadian Ergonomists offered a training session under the theme *Pour une meilleure manutention (For better handling)*. Developed by ergotherapist Josée-Marie Couture (4) and researcher Denys Denis (5), this activity introduced participants to innovative methods and tools that they could integrate into their own learning approaches.

MARCH

The European publisher Elsevier Limited sent IRSST researcher Pierre Marcotte (1) a congratulatory note on being one of the most quoted authors in the Journal of Sound and Vibration.

Denis Turcot (2), coordinator of the Noise and Vibration field, assisted by Micheline Laperle (3), invited some fifty people to a colloquium on noise. This scientific activity featured the presentation of prospects and highlights in the area of noise and hearing, the challenges of communication in the presence of noise, the development of protective devices, and effective methods for the implementation of an action plan on noise control.

APRIL

The IRSST was officially registered as member partner of the Institut de recherche et de développement en agroenvironnement (IRDA, research and development institute for the agri-environment). This participation makes IRSST representative Jacques Lavoie an active member of the IRDA, with voting rights at the general assembly.

On the initiative of Chantal Tellier (4), coordinator of the Protective Equipment field at the IRSST, some thirty people discussed the problems related to shoring, as well as the OHS of people working in trenches and excavations. Researcher André Lan (5) presented a summary and the benefits of the research work on shoring.

MAY

The International ASTM offered Jaime Lara (1), research leader for the IRSST's Protective Equipment field, the position of secretary of the F23 Committee on the resistance of protective clothing against chemical risks, biological risks, extreme temperatures, etc. Comprised of over 200 members, this committee develops standards, guides and good practices that promote worker safety and well-being.

The IRSST paid tribute to the excellence of the graduate studies scholarship recipients in the 2007-2008 competition. On this occasion, researcher André Plamondon (2), himself a former scholarship recipient, enthusiastically described his research career at the IRSST.

The Director of the IRSST's Research and Expertise Division, Alain Lajoie (3), was named President of the Association québécoise pour l'hygiène, la santé et la sécurité du travail (Québec occupational hygiene, health and safety association), at its annual meeting in the Saguenay. As in previous years, the IRSST's personnel contributed significantly to this event, with no fewer than eight scientists presenting training sessions or giving lectures.

An aerosol exposure system facilitating asthma diagnosis, the *SCL GenaSIC*, was launched by the company SCL Medtech. The IRSST's President and CEO, Diane Gaudet, took the floor during the ceremony, accompanied by Dr. Jean-Luc Malo, Simon Leblond from SCL Medtech, and the Minister of Public Works and Government Services, Michael Fortier. She underlined the contribution of Yves Cloutier, Jacques Lesage (4), Daniel Drolet (5), Jérome Boutin (6) and Bernard Caron (7) from the IRSST. The predecessor of this device was developed in the laboratories of the IRSST, which assigned a licence for the use of its patent.

JUNE

In Athens, the research leader for the Accidents field, Esther Cloutier (1), won first prize during a poster presentation at the International Symposium *Risks for health care workers: prevention challenges*. Elise Ledoux (2), Madeleine Bourdouxhe (3), Hélène David (4), Isabelle Gagnon and François Ouellet (5) collaborated on this poster, which was in competition with nearly 100 other entries.

JULY

Hundreds of toxicologists from some fifty countries came to Montréal for the 11th International Congress of Toxicology. The IRSST's Marc Baril (6) chaired the local organizing committee for this highly successful event. Organized by the International Union of Toxicology, this conference allowed over 150 researchers to present their results in various branches of toxicology.

AUGUST

Research reports and guides produced by the IRSST can now be found in the OHS-UPDATE database. This is the result of the joint efforts of Maura Tomi (7), from the Communications Division, and Sheila Pantry, editor of several OHS electronic newsletters. With more than 800,000 references, OHS-UPDATE is one of the largest OHS databases.

SEPTEMBER

The IRSST hosted the Knowledge Transfer Committee of the Canadian Centre for Health and Safety in Agriculture, which, for the first time, was held in Québec. Co-chaired by the IRSST's President and CEO, Diane Gaudet (1), and Bruce Johnson, General Manager of the Farm and Ranch Safety and Health Association, this committee's main mandate was to draw up a business plan for developing applied research and knowledge transfer in the area of occupational health and safety in agriculture.

Research assistant at the IRSST, Maud Gonella (2) received the Entrac scholarship awarded to master's students in ergonomics. Co-directed by Monique Lortie from UQAM and Denys Denis from the IRSST, this student completed a master's degree in prevention in SMEs in the carpet laying sector.

OCTOBER

Denise Chicoine, coordinator, and Marie St-Vincent (3), research leader of the MSD field, organized a seminar at the IRSST bringing together ergonomists as well as other scientists and professionals interested in the theme "Le suivi des interventions de prévention des TMS: concepts, approches et methodes" (Monitoring MSD prevention interventions: concepts, approaches and methods). Sandrine Caroly (4), from the Centre de recherche innovation socio technique et organisation industrielle (CRISTO, sociotechnical innovation and industrial organization research centre), of the Université de Grenoble, was the guest speaker.

NOVEMBER

Pierre-André Julien (1) was the 2007 winner of the Carrière institutionnelle (institutional career) award sponsored by the IRSST and presented by the Association de la recherche industrielle du Québec (Québec industrial research association) at the Prix Innovation gala.

The Cabinet appointed Luc Meunier (2) as the new chair of the Board of Directors and CEO of the CSST, as well as the chair of the IRSST's Board of Directors. Holder of a master's degree in business administration, Mr. Meunier is well known in the Québec public service, where he has worked since 1987.

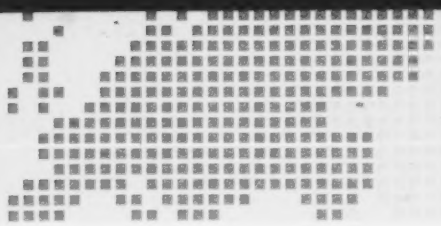
The Centre for Interdisciplinary Research in Rehabilitation of Greater Montreal (CRIR) admitted Christian Larivière (3) to its Board of Directors as a scientist representative. Researcher at the IRSST since 2001, he carries out occupational rehabilitation projects.

DECEMBER

The Scientific Director of the Réseau provincial de recherche en adaptation réadaptation (provincial network of adaptation/rehabilitation research), Bertrand Arsenault (4), was appointed head of the IRSST's Occupational Rehabilitation field. This full professor in the Faculty of Medicine of the Université de Montréal has developed specific expertise in the evaluation of muscular weakness and fatigue among people with low back pain or chronic neck pain.

The Noise and Vibration field also has a new research leader, Franck Sgard (5). Leader of the acoustics team of the Laboratoire des sciences de l'habitat of the École nationale des travaux publics (national public works school), in France, he has lent his expertise for over a year to a project on acoustical machine enclosures.

Carole Bellazzi (6) was appointed assistant to the scientific director, Paul-Émile Boileau (7), while Patrice Duguay (8) became the new coordinator of the IRSST's Statistical Knowledge and Surveillance Group.



AUSTRALIA

Headed by the IRSST's President and CEO, **Diane Gaudet**, a Québec mission made up of representatives of seven OHS organizations went to Australia to investigate its know-how and best practices in prevention, rehabilitation and research. Funded by the Ministry of International Relations of Québec, the mission dovetailed with the measures advocated at the meeting, held in Montreal in 2006, by the prime ministers of the states, territories and provinces of Australia and Canada. This Québec delegation was comprised of representatives of the CSST, CSN and four joint sector-based associations, namely ASSTSAS, ASP imprimerie, ASP produits en métal et électriques, and ASP affaires municipales.

BELGIUM

The minister responsible for international relations and the francophonie, **Monique Gagnon-Tremblay**, gave the go-ahead for a cooperative project between the IRSST and Belgium. The research leader of the Accidents research field, **Esther Cloutier**, assisted by researcher **Élise Ledoux**, submitted a project aimed at promoting the quality of employment in home support services in Wallonia-Brussels and in Québec. Funded by Belgian partners and the V. Commission mixte permanente de coopération Québec, Wallonie-Bruxelles (5th permanent joint commission on cooperation between Québec-Wallonia-Brussels), this project will make it possible to compare methods and to promote good practices in a sector that is growing rapidly but marked by problems, mainly in the area of OHS.

FRANCE

A framework agreement was signed with the Agence française de sécurité sanitaire de l'environnement et du travail (Afsset, the French Agency for Environmental and Occupational Health Safety) during a visit headed by its CEO, **Dr. Michèle Fromet-Védrine**. This partnership establishes the parameters governing bilateral collaboration in research and expertise activities and constitutes an ideal opportunity for the IRSST to increase its scientific leadership and to benefit from experience and actions in France and elsewhere in Europe. The IRSST already plays a reference role for Afsset, since the French agency has recognized the expertise of chemist **Chantal Dion** by inviting her to be part of a working group on short asbestos fibres.

THE IRSST

PRESENT FOR ITS PARTNERS

Through its research work, its role as scientific benchmark, its promotional activities, its network of collaborators, as well as through its laboratory services and the expertise it provides the public prevention network, the IRSST has been making its presence felt in Québec since 1980.

The year 2007 was no exception, with no fewer than 69 partner organizations involved in research projects. Often carried out in the field, in collaboration with the key OHS practitioners and employer and worker representatives, research at the IRSST makes every effort to meet needs expressed by the community. In this way, mandators and partners are guaranteed that the research conducted by the IRSST will generate useful results.

THE IRSST

PRESENT THROUGH ITS QUALIFIED PERSONNEL

The IRSST team is comprised of 151 people, including 101 researchers, professionals and technicians. In 2007, the organization's workforce was enhanced by a total of 27 new employees, five of whom assumed regular positions.

ADJUNCT PROFESSORS

Twenty-two IRSST scientists hold the status of adjunct professor, namely six more than last year. The IRSST's personnel are therefore present in a wide range of Québec universities and departments, not to mention the three researchers who enjoy this status in universities in other Canadian provinces. In 2007, IRRST scientists with the status of adjunct professor co-directed 35 theses, including 11 doctoral studies and one post-doctoral study.

STUDENTS, TRAINEES AND COLLABORATORS

In keeping with its strategic positioning, the IRSST opened its doors to some thirty students, trainees and collaborators in 2007. In so doing, its scientists shared their knowledge background with the interns, who provided them with valuable assistance in return. This assistance is particularly appreciated in the Safety of industrial tools, machines and processes and the Protective equipment fields, where succession is a rarity.

SUCCESSION

The IRSST focused on getting young people interested in OHS research. In 2007, its Graduate Studies Scholarship Program accepted a total of 67 applications. Of this number, 39 met the program's eligibility criteria as well as the relevance and scientific quality criteria for the research project. The head of the program, **Marie-France d'Amours**, was pleased to announce that all those whose candidacies were retained received a scholarship and that the budgetary envelope granted by the Board of Directors was fully used. In addition, a thematic scholarship was awarded to a candidate whose research topic was related to the Safety of industrial tools, machines and processes field. The IRSST is making its presence felt among young people. The implementation, by Opération JeuneSST, of a strategy for developing research on youth and OHS was supplemented by promotional activities carried out mainly through an association with the Conseil du loisir scientifique de la région Métropolitaine as sponsor of Expo-Sciences.

HEALTH AND SAFETY OF PERSONNEL

The saying "Practice what you preach" applies well to the IRSST's Health and Safety Committee (HSC), which annually updates a prevention plan with the goal of integrating the best OHS practices into its daily activities.

In 2007, the issue of training came to the attention of the HSC, which organized several training sessions. Thus, all employees required to handle and use controlled products in their workplace received training on the Workplace Hazardous Materials Information System (WHMIS). For their part, employees in charge of sending or receiving dangerous merchandise took a training course on the transportation of hazardous materials. The IRSST also ensured that personnel having to move around the construction worksite obtained a proficiency certificate after taking an OHS training course pertaining to the special conditions in the construction industry. Moreover, as part of a research project, five employees benefitted from instruction on aerial lifts and lift platforms.

During the year, 12 reports were entered in the accident, incident and first aid register, one of which was the subject of an investigation.

Since the IRSST's occupational injury record surpassed that of businesses operating in the same sector of activity, its CSST assessment rate was once again lower than the unit rate.

A GREEN PLAN

Acting in a proactive manner, the IRSST's President and CEO was quick to accept the Québec Government's invitation to endorse the principles included in the Sustainable Development Act. An eight-member committee was formed, comprised of **Marie-Claude Barrette**, **Nancy Lacombe**, **Josée Routhier**, **François Ouellet**, **Stéphanie Viau**, **Jacques Lavoie**, **Pierre Marcotte** and **Jacques Millette**. Mobilized around the common goal of sustainable development and the preservation of the quality of life of current and future generations, the committee is responsible for developing an action plan to ensure the IRSST's participation in development that meets present needs without compromising the ability of future generations to meet their own needs.

ORGANIZATIONAL CHART

As at December 31, 2007

BOARD OF DIRECTORS

EXECUTIVE COMMITTEE

PRESIDENT AND CEO
DIANE GAUDET

SCIENTIFIC ADVISORY BOARD

INSTITUTIONAL RELATIONS AND INTERNATIONAL COORDINATION

COMMUNICATIONS DIVISION
Jacques Millette

FINANCE AND ADMINISTRATION DIVISION
Jean-Guy Martel

- FINANCIAL RESOURCES
  Louise Lafontaine
- HUMAN RESOURCES
  Jean-Guy Martel
- INFORMATION TECHNOLOGIES
  Jacques Roy
- PHYSICAL RESOURCES
  Jean-Guy Martel

RESEARCH AND EXPERTISE DIVISION
Alain Lajoie

- RESEARCH DEPARTMENT
  Alain Lajoie
- RESEARCH AND EXPERTISE SUPPORT DEPARTMENT
  Claude Dallaire
- KNOWLEDGE TRANSFERT AND PARTNER RELATIONS DEPARTMENT
  Louis Lazure
- LABORATORY SERVICES AND EXPERTISE
  Jacques Lesage

SCIENTIFIC DIVISION
Paul-Emile Boileau

- STRATEGIC WATCH AND QUALITY MANAGEMENT DEPARTMENT
  Jean-Claude Martel

FINANCING

REVENUES $21,723,827

CSST	82.9%	Special Projects	1.9%
Laboratory Services	11.7%	Beryllium	0.3%
External Contracts	2.2%	Other	1.0%

EXPENSES $20,727,394

Internal Research	49.7%	Communications	4.6%
External Research	16.6%	Management	3.6%
Laboratory Services	12.0%	External Contracts	2.1%
Finance and Administration	9.5%	Special Projects	1.6%
		Beryllium Projects	0.3%

THE IRSST

PRESENT THROUGH ITS GOVERNING BODIES

As at December 31, 2007

The members of the **Board of Directors** met seven times, while those of the Executive Committee* held five meetings.

CHAIR
Luc Meunier*

EMPLOYER REPRESENTATIVES
François Cliche
Céline Dugré-Charron
Richard Fahey
Franco Fava
Yves Gilbert
Michel Kelly-Gagnon*
François E. Pelletier

WORKER REPRESENTATIVES
Michel Arsenault
Andrée Bouchard
Michel Poirier*
Claude Faucher
Jean Lavallée
Henri Massé*
Roger Valois

OBSERVER
Daniel Charbonneau

IRSST MANAGEMENT
Diane Gaudet

The members of the **Scientific Advisory Board** held eight meetings, including two special meetings.

CHAIR
Diane Gaudet

WORKER REPRESENTATIVES
Micheline Boucher
Jean Dussault
Daniel Flynn
Denis Mailloux

EMPLOYER REPRESENTATIVES
Robert Borduas
Richard Lapointe
Roger M. Laporte
Alain Neveu

MEMBERS OF THE SCIENTIFIC AND TECHNICAL COMMUNITIES
Jean-Marc Brodeur
Christine Colin
Mireille Mathieu
Yves Rousseau
Charles Terreault
André Van Neste

OBSERVERS
Guylaine Rioux
Alain Lajoie

The IRSST pays tribute to Charles Terreault [illegible] and to Mireille Mathieu who was appointed by the Minister of Education, [illegible]

During the year, the position of interim Chair of the Board of Directors was successively held by Réal Bisson and Richard Verreault.

On the Scientific Advisory Board, the retiring Robert Guimond was replaced by Denis Mailloux, while the mandate of Jean-Marc Brodeur was renewed.

On behalf of the personnel, the IRSST President and CEO, Diane Gaudet, welcomed the arrival of the new chair and expressed her sincere gratitude to the outgoing members for the work achieved.

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(All IRSST publications are peer-reviewed)

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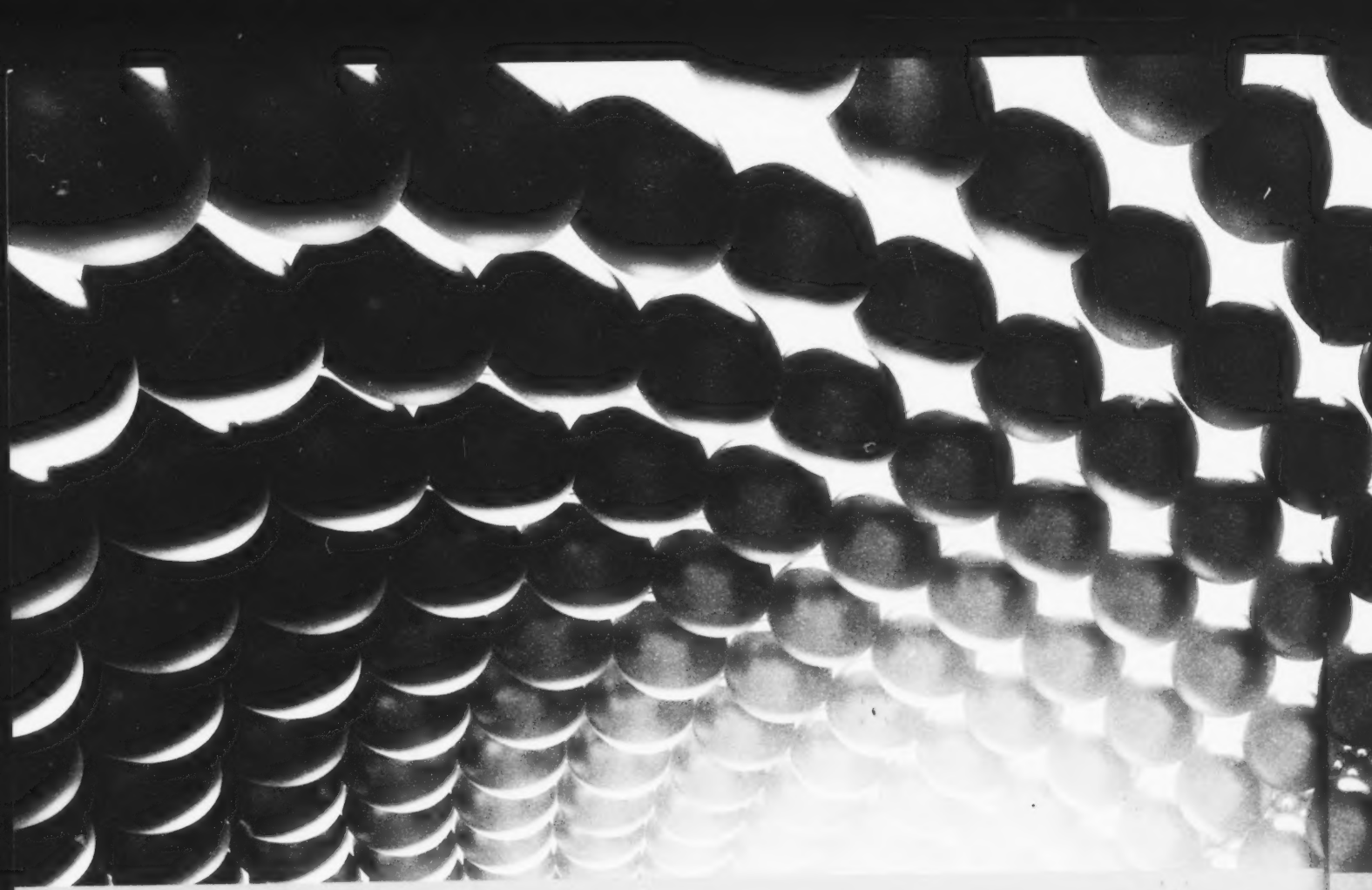

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To contribute, through research, to the prevention of industrial accidents and occupational diseases as well as to the rehabilitation of affected workers.

To offer the laboratory services and expertise necessary for the activities of the public occupational health and safety prevention network.

To disseminate knowledge and to act as scientific benchmark and expert.

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Through its leadership in occupational health and safety research, the IRSST intends to:

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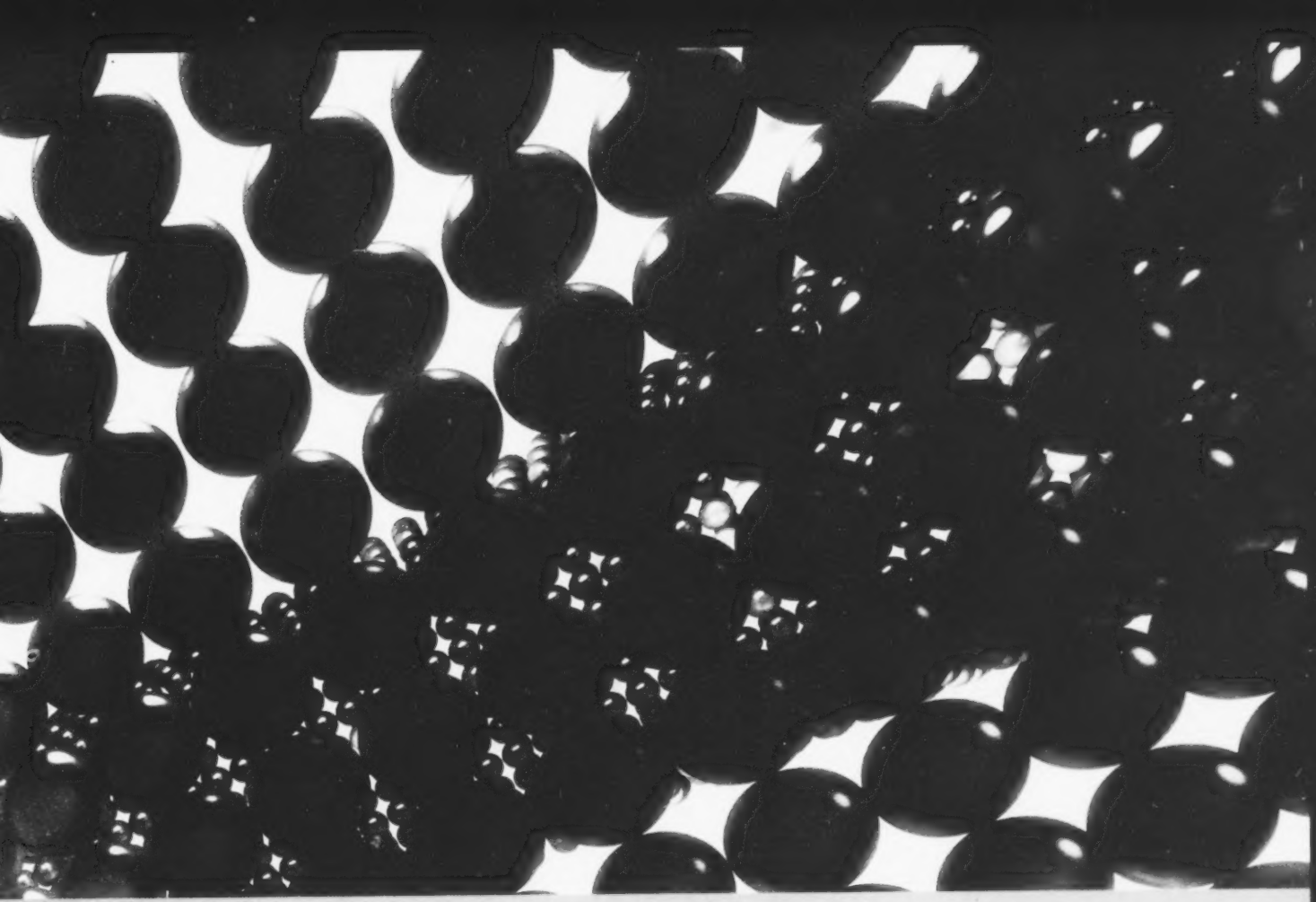

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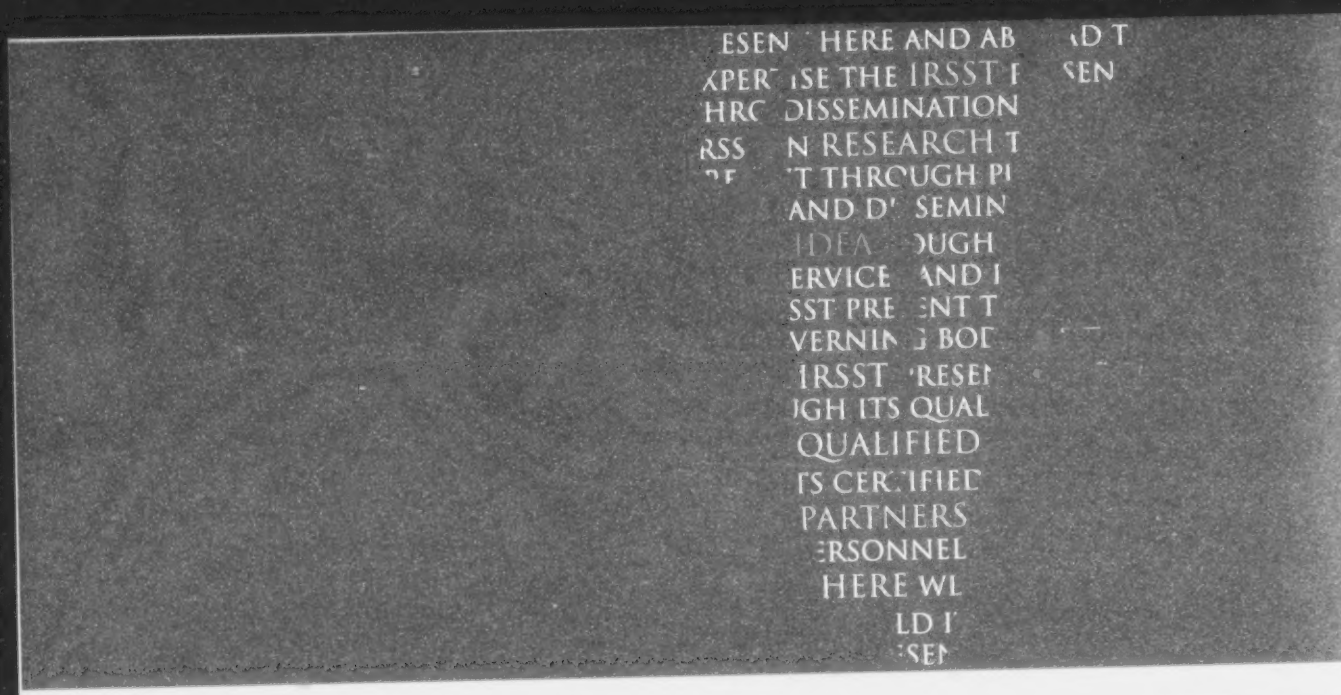
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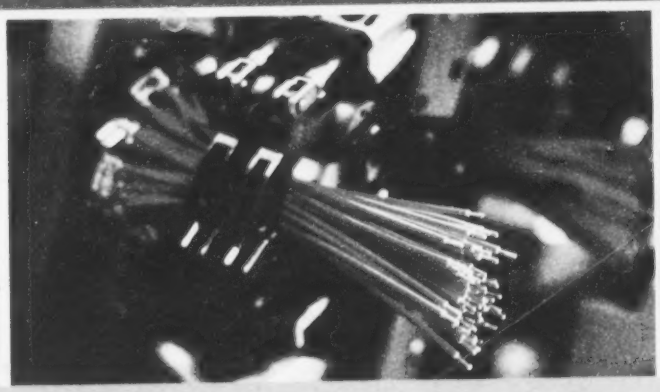

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